Evaluation of endometrial Anti-Glaidine antibodies and tissue Trans-Glutaminase in Children with autism

Abstract

Background and Objective: The main characteristic of autism is the defect in social interactions, communication, limited attention, and repetitive behaviors. Considering the fact that the gluten-free diet prescribed for celiac disease is proven to be effective in improving the behavior of patients with autism, as well as low studies in this field, the Objective of this study was to evaluate of endometrial Anti-Glaidine antibodies and tissue Trans-Glutaminase in patients with autism in Ardabil.

Methods: This case-control study was performed on 62 children with ASD (autism) over a one year period, and 62 children admitted to the hospital without ASD and specific disease were selected as controls and entered the study. The relevant checklist, which included demographic information such as age, gender, height, weight, location, nutritional habits and symptoms of aggression and decentralization, was completed. Blood tests were performed on IgA (IgG) TTG (IgG-IgA) AGA from the subjects. Finally, the association of antibodies against gladiolone and transglutaminase in patients with autism and control group was analyzed.

Results: The mean age of patients in the case group was 9/23 ± 4.67 years with a range of 3-17. The mean age of patients in the control group was 9.37 ± 5.12 years with a range of 4-17. In the case group, the anti-TG (IgG) concentration was 8.18±6.79 μg/ml and the mean anti-transglutaminase (IgA) was 7.7±7.8 U/ml. In the control group, the anti-TG (IgG) was 2.21±2.88 U/ml and the anti-transglutaminase content (IgA) was 2.65±1.46 U/ml. In the case group, the anti-glyadin (IgG) concentration was 17.41±9.29 U/ml and the anti-glyadine (IgA) was 16.92±13.52 U/ml. In the control group, the antiglyadine (IgG) concentration was 6.67±4.34 U/ml and the anti-glyadine (IgA) was 5.83±4.66 U/ ml.

Conclusion: In our study, there was a significant difference between the level of antigliadin and anti-tTg antibodies between the two groups of autism and normal subjects. In other words, the level of antibodies mentioned in the autism spectrum group was higher than that of the normal population. This can be effective Gluten-free diets in the absence of autism spectrum.

Keywords: Anti-glaidine antibodies and tissue trans-glutaminase, autism, Ardeb